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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,972	12/30/2003	Patrick Zuili	BSM-10004/29	9010
26797	7590	10/17/2007	EXAMINER	
SILICON VALLEY PATENT AGENCY			LEE, SEUNG H	
7394 WILDFLOWER WAY			ART UNIT	PAPER NUMBER
CUPERTINO, CA 95014			2876	
MAIL DATE		DELIVERY MODE		
10/17/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/747,972	ZUILI, PATRICK	
	Examiner	Art Unit	
	Seung H. Lee	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 03 August 2007.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

1. Receipt is acknowledged of the response filed on 03 August 2007, which has been entered in the file.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-6, 8, 9, 13, 16-18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US 6,612,488, of the record) in view of Piosenka et al. (US 4,993,068)(hereinafter referred to as 'Piosenka') and Schneier et al. (US 5,768,382)(hereinafter referred to as 'Schneier').

Re claims 1-3, 5-6, 21: Suzuki teaches a method of conducting transaction comprising connecting a card transaction terminal (300) serving as a separate unit to a cellular phone (100) serving as a device wherein the cellular phone having a keypad and display, the transaction terminal operating securely and independently from the cellular phone, initiating a transaction using the cellular phone (col. 10, lines 8-11) and communicating the transaction request to an transaction authorization computer (400) serving as a third party, receiving a transaction complete signal at the card transaction terminal via the cellular phone, wherein the card transaction terminal is caused to

request the personal data from the cellular phone to conduct the transaction (see figs. 1-8; col. 9, line 5- col. 11, line 30).

However, Suzuki fails to particularly teach that the separate comprises biometric sensors.

Piosenka teaches an identification system comprising a fingerprint processor (33) and voice print processor (34) for identifying user (see figs. 1-3; col. 7, line 38- col. 8, line 22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Piosenka to the terminal of Suzuki in order to provide an improved security by authenticating biometric data of user such as fingerprint and voice as taught by Piosenka.

Suzuki/Piosenka fail to particularly teach that the request is encrypted using biometric input.

Schneier teaches a digital signature algorithm for verification purposes wherein biometric fingerprint data is hashed to verify the user at a central computer (12) (see figs. 1-3, 10A- 11; col. 17, lines 43-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Schneier to the teachings of Suzuki/Piosenka in order to provide a centralized security system by verifying/authenticating user by authenticating the biometric data such as fingerprint at the central computer.

Re claims 8, 9, and 13: A DTMF (Dual Tone Multiple Frequency) is tone signal is sued to transmit the PIN input at the cellular phone (col. 10, lines 37-44),

Re claims 16 and 17: The PIN can be encrypted to increase the security using well-known public-key cryptography (not particularly disclosed)(col. 10, lines 45-48),

Re claims 18: The transaction data can be stored (col. 10, lines 57-62).

4. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as modified by Piosenka and Schneier as applied to claim 1 above, and further in view of Simonds (US 2002/0023027, of the record).

The teachings of Suzuki/Piosenka/Schneier have been discussed above.

Although, Suzuki/Piosenka/Schneier teaches a device is a PDA and signal to be authenticated is a high-contrast optical signal.

Simonds teaches that the mobile terminal (33) such as PDA retrieve the barcodes image from the server for displaying on the display of the mobile terminal as proof of the purchase wherein the retrieved barcode image serves as a high-contrast optical signal to be authenticated/verified (see figs. 1-3; paragraphs 0021-0042).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Simonds to the teachings of Suzuki/Piosenka/Schneier in order to verify the purchasing of goods/services by reading the barcode images displayed on the display device for enabling transaction therewith.

Moreover, such modification (i.e., a memory for storing a session constituting transaction request and authentication signal) would have been a well known in the art at the time the invention was made to complete the particular transaction using the transaction request and result of the transaction request (e.g., the retrieved barcode images).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as modified by Piosenka and Schneier as applied to claim 1 above, and further in view of Barnes et al. (US 5,465,386, of the record)(hereinafter referred to as 'Barnes').

The teachings of Suzuki/Piosenka/Schneier have been discussed above.

Although, Suzuki/Piosenka/Schneier teaches the cellular phone can communicate using DTMF signal via the DTMF interface, they fails to teach or fairly suggest that the DTMF signal is an audio frequency keying signal.

However, Barnes teaches a mobile communication system for communicating using AFSK signal (see Figs. 8-11; Abstract; col. 23, lines 7-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Barnes to the teachings of Suzuki/Piosenka/Schneier in order to provide an alternative method for transmitting data/information using the well-known method such as ASKF instead of a frequency-keying signal.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as modified by Piosenka and Schneier as applied to claim 1 above, and further in view of Zele et al. (US 5,734,975, of the record)(hereinafter referred to as 'Zele').

The teachings Suzuki/Piosenka/Schneier have been discussed above.

Although, Suzuki/Piosenka/Schneier teaches the cellular phone can communicate using DTMF signal via the DTMF interface, he fails to teach or fairly suggest that the DTMF signal is a PL signal.

However, Zele teaches that a portable radio receiver comprises a privacy feature known as private line (PL) (see col. 1, lines 11-18).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Zele to the teachings of Suzuki/Piosenka/Schneier in order to provide an improved and an enhanced system for only activating the portable card reader for initiating transaction when the reader received particular signal.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as modified by Piosenka and Schneier as applied to claim 1 above, and further in view of Chesarek (US 4,386,266, of the record)

The teachings of Suzuki/Piosenka/Schneier have been discussed above.

Although, Suzuki/Piosenka/Schneier teaches the cellular phone for reading information from keyboard, he fails to teach or fairly suggest that the terminating of the operation if a PIN entry is attempted more than predetermined number of times.

However, Chesarek teaches to terminate the transaction after predetermined number of tries to enter the PIN number (114) (see Fig. 9; col. 9, lines 47-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Chesarek to the teachings of Suzuki/Piosenka/Schneier in order to provide an additional security means for allowing user(s) to enter PIN number predetermined number of times to prevent unlimited number of tries to enter PIN number. Moreover, such modification would provide an improved customer service since the terminal can be released to the other customers for accessing the data/information using the terminal.

8. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as modified by Piosenka and Schneier as applied to claim 1 above, and further in view of Zhou et al. (US 5,796,858, of the record)(hereinafter referred to as 'Zhou').

The teachings of Suzuki/Piosenka/Schneier have been discussed above.

Although, Suzuki/Piosenka/Schneier teaches a portable terminal having the card reader, he fail to teach that the card reader comprises a biometric input device.

However, Zhou teaches a cellular phone comprises a fingerprint sensing system (see Figs. 1-9; col. 7, line 53+).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Zhou to the teachings of Suzuki/Piosenka/Schneier in order to provide an additional security for authenticating the user(s) with fingerprint during transactions such as downloading application and/or making payment for products.

9. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as modified by Piosenka and Schneier as applied to claim 1 above, and further in view of Ouimet et al. (US 6,823,317, of the record)(hereinafter referred to as 'Ouimet').

The teachings of Suzuki/Piosenka/Schneier have been discussed above.

Although, Suzuki/Piosenka/Schneier teaches a portable terminal having the card reader, he fails to teach that the card reader comprises a headset.

However, Ouimet teaches a portable terminal (18) comprises an audio headset (59) with card readers (53 and 55) for reading user confidential data (see fig. 5; col. 4, line 56- col. 5, line 64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ouimet to the teachings of Suzuki/Piosenka/Schneier in order to provide an improved sales environment by requesting various information remotely using the headset and conducting financial transaction wirelessly/remotely using the card readers attached/affixed to the portable terminal therewith.

10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as modified by Piosenka and Schneier as applied to claim 1 above, and further in view of Alice (US 2003/0055738).

The teachings of Suzuki/Piosenka/Schneier have been discussed above.

Although, Suzuki/Piosenka/Schneier teaches to authenticate user, they fail to particularly teach that the challenge response protocol is used for authenticating.

However, Alice teaches a challenge and response protocol for authenticating signature (see figs. 8-11; paragraph 0020)>

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the well-known challenge and response protocol as taught by Alice to the method of authenticating as taught by Suzuki/Piosenka/Schneier in order to authenticate transaction information that is occurring in a low bandwidth.

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

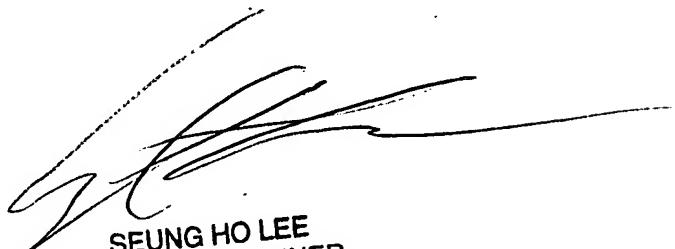
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seung H. Lee whose telephone number is (571) 272-2401. The examiner can normally be reached on Monday-Friday, 7:30 AM- 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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October 05, 2007



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